

Machine Dossier for BEM2a-53
(Benton Pantograph)

Part V: Plans and Activities

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V.1• Plans for the Machine’s Future

V.1.A• General Note on Aesthetics and Finish

There is no valid reason to perform any cosmetic alteration or refinishing. Although the machine was incomplete as received, all of the components of it which were present were (and are) in good working order.

The general principles of restorative *conservation* should be followed. No irreversible alteration should be made which is not necessary. Making the machine shiny and pretty is not necessary.

V.1.B• Return to Operational Status

For the purpose of using this machine as a testbed for reconstructing the operating practices of American Type Founders, it will be brought back to operational status. This can be done without any irreversible changes to the machine.

The following missing components will have to be reverse-engineered and constructed from scratch:

- Group 70 Matrix jig (CircuitousRoot, traditional mats to 60pt)
- 30.90.v1 Wand chuck, CircuitousRoot
- 10.62 Pattern wedge
- Group 42 Leverage gauges, CircuitousRoot, as needed
- Group 43 Expansion/condensation gauges, CircuitousRoot, as needed
- Quill drive (evaluate and figure out)

Additionally, Sherline brand “WW” (so called) collets will have to be modified to fit the existing HEBCO quills.

To allow test casting on the most easily available caster (a Thompson Type Caster), the Matrix Jig will be made with accessories allowing the cutting of Monotype-Thompson compatible 0.050” drive flat mats.

V.2• Record of Actions Taken and Modifications Made

V.2.A• 2021 Upon Receiving

The pantograph and the accompanying power stand were placed on separate mobile bases for convenience.

The pantograph was sprayed liberally with Boeshield T-9 moisture displacing rust inhibitor.

V.2.B• 2023 During Evaluation

Group 10 and group 11 were substantially disassembled, reassembled, and lubricated with BreakFree (brand) CLP.

Filler set screws were added for these locations (no screws were present as received):

- 10.46 Rotating motion plate set screw (1)
- 10.54 lateral motion plate face screw (4)
- 11.20 Set-up square main frame plug screw (2)